THE IBIS.

EIGHTH SERIES.

No. XXIV. OCTOBER 1906.

XXXVI.—Field-Notes on the Birds of Chinkiang, Lower Yangtse Basin.—Part II.* By J. D. D. LA TOUCHE, C.M.Z.S., M.B.O.U.

38. Lanius sphenocercus Cab.

Styan, Ibis, 1891, p. 348.

Once, on February 22, I saw a large grey Shrike in a bare reed-field. It was very wild and quite unapproachable, perching, after the long flights it made across the fields, on large trees bordering the reed-ground.

39. Lanius schach Linn.

Styan, Ibis, 1891, p. 347; La Touche & Rickett, Ibis, 1905, p. 37.

Common in winter on the plain and in the loess country, but not noticed in late spring or during summer. A few pairs most probably breed in the district in suitable localities.

I once met a man carrying on a perch an albino Shrike, which was, I have no doubt, an individual of this species. It was pure white with pink eyes and legs. The bird was quite tame, and, according to its owner, had come from Shanghai.

40. Lanius Bucephalus T. & S.

Styan, Ibis, 1891, p. 347.

A common bird in winter from October to the end of February. Styan mentions the capture of an example in March.

41. Lanius Lucionensis Linn.

Styan, Ibis, 1891, p. 348.

This species passes in May and from the end of August to the beginning of October. A few pairs breed in the vicinity of Chinkiang. On July 4, 1902, I bought three nestlings from a bird-catcher. Their plumage was as follows:—Above light greyish chestnut, barred with dark brown; head brownish grey, also barred with dark brown, and having the feathers tipped with buff; lores and ear-coverts blackish, a whitish yellow stripe over the eye (continued in two of the birds round the forehead); under parts pale buff, with brownish lunules and bars on the sides of the breast. Wings, larger wing-coverts, and tail brown, with subterminal black and terminal buff edgings to the feathers.

The gradual change of plumage was as follows:-

July 11.—The back was becoming darker, the barring on the head and the eyebrow were more distinctly marked.

July 30.—The birds appeared fully grown and the upper back had turned brown.

Aug. 20.—The head and back were becoming plain liverbrown through the growth of new feathers. The new plain brown feathers then covered the back of one bird and part of its head.

Sept. 13.—All the three birds were in complete immature dress with a well-marked whitish eyebrow, which in two of them passed round the forehead.

One of these birds died while in immature dress; the remaining two, a male and a female, assumed the adult plumage in the following spring and early summer. The change began at the beginning of March, when the worn feathers on the forehead were being replaced by new grey feathers.

I reared these Shrikes on locusts, which were that year

only too abundant. They also ate a little chopped raw beef and bread and milk. They were extremely voracious; in a wild state this species must consume an immense number of insects. I occasionally saw my birds with a grasshopper in their bill as well as one in each foot. They began to use their feet for holding their food about July 15. The male began during the first winter to sing very sweetly. The song was low and was often uttered at night by lamplight.

The male died during the second winter; the female was brought to Europe, and is now living in the Gardens of the Zoological Society of London.

Two nests, each containing three slightly incubated eggs, were brought to me on June 6, with the female in one case. One of these nests is a large and massive cup with thick sides and strong hard base. It is made of roots, leaf- and grassstems, bents, a good deal of grass-down with a feather or two, a bit of native cotton-cloth, and a piece of dirty cotton-wool —evidently the stuffing of some native wadded garment worked in with the roots, &c. The lining is of fine roots and fine grass-stems. Outwardly it measures: diameter $5\frac{1}{4} \times 6\frac{1}{4}$ in., depth 3 in. The inner measurements are: diameter $3 \times 3\frac{1}{4}$ in., depth about 2 in. The other nest is not so large; it is made of moss, roots, grass-stems, grasses, and a little grass-down, wool, and animal hair. The lining is of fine roots and grass-stems with a feather or two. The outer measurements are: diameter $4\frac{1}{2} \times 5\frac{1}{2}$ in., depth 3 in. Inside, the diameter is $2\frac{3}{4} \times 3$ in. and the depth 2 in. The eggs are pale yellow-green stone-colour, with a broad ring round the larger end of confluent and detached spots and specks of pale violet-grey, over which are spots of very pale brownish; the rest of the shell is sparsely spotted and speckled with the latter colour and with a very few grey markings. They are very smooth, have a slight gloss, and are ovate in shape. They average $0.91 \times 0.66''$; the largest is $0.92 \times 0.66''$, and the smallest $0.89 \times 0.66''$.

42. Lanius superciliosus Latham.Styan, Ibis, 1891, p. 347.A handsome adult female was shot on May 19.

43. Lanius tigrinus Drapiez.

Styan, Ibis, 1891, p. 348.

These birds appear in May, during which month they are not uncommon. Some breed in the district, but I was unable to procure any nests. A pair of live adults caught with bird-lime was brought to me on May 29. I kept them for some time, but, as they continued wild, I soon liberated them.

44. Pericrocotus cinereus Lafr.

Styan, Ibis, 1891, p. 347.

This species is extremely abundant in woods on the hills during May. One individual was shot on the plain on April 18. I saw another on October 18 on the plain on the north bank of the river, but did not meet with any others during the autumn. None remain to breed.

45. Pericrocotus cantonensis Swinhoe.

Styan, Ibis, 1894, p. 336; La Touche & Rickett, Ibis, 1905, p. 37.

A single pair was shot on May 28 in a wood near Chinkiang. The state of the testes and ovary shewed that the birds were about to breed. This is probably the northern limit of this Minivet in East China. I never met with it again during my stay at Chinkiang.

46. Самрорнава мецанортека (Rüppell).

Styan, Ibis, 1891, p. 347; La Touche & Rickett, Ibis, 1905, p. 38.

One specimen was shot by the collectors on May 15. I saw no others at Chinkiang.

47. Oriolus diffusus Sharpe.

Styan, Ibis, 1891, p. 346; La Touche & Rickett, Ibis, 1905, p. 38.

This Oriole is extremely common during summer, and nests on tall trees in the vicinity of hamlets and houses on the plains. It also breeds on the wooded hills. The collectors told me that while they were at the hills they saw on May 11 a party of about thirty of these birds which had probably just arrived.

I have obtained eggs from June 6 to July 16. The men whom I employed in searching for nests told me that there were two broods in the season. A series of twenty-seven eggs taken at Chinkiang shews that the ground-colour varies from pale to deep blush pink. The shape varies from broad ovate to long pointed ovate, one specimen is of a somewhat cylindrical oval. They average $1.18 \times 0.85''$; the longest is $1.30 \times 0.85''$, the shortest are $1.10 \times 0.85''$. The broadest diameter is 0.91'' and the narrowest 0.80''.

The nests have been described by Rickett and myself. A great many of those taken at Chinkiang were chiefly made of reed-flower tops and grass-down. Although most of those which I saw there were built on tall trees at a considerable height, at least three were placed on small trees and were some fifteen feet or less from the ground.

48. Acridotheres cristatellus (L.).

Styan, Ibis, 1891, p. 357; La Touche & Rickett, Ibis, 1905, p. 40.

Resident and abundant. I have seen cages full of young birds hawked about the Concession in June and later in the summer. There are probably two broods in the season. Four eggs taken from a hole in the rotten branch of a medium-sized willow on May 29 were hard-set. The nest-hole was lined with chicken's feathers, straws, &c.

49. Spodiopsar cineraceus (Temm.).

Styan, Ibis, 1891, p. 357.

A very abundant winter bird from September onwards.

50. STURNIA STURNINA (Pall.).

Styan, Ibis, 1891, p. 357.

This species passes Chinkiang in May and September. I kept a female caught with bird-lime alive for nearly a year. It became quite tame at once, but was sickly and never throve.

51. Alseonax latirostris (Raffl.). Styan, Ibis, 1891, p. 348.

Abundant on passage, appearing about mid-April and remaining throughout May. It returns in September.

52. Hemichelidon sibirica (Gm.).

Styan, Ibis, 1891, p. 349.

This species is not at all uncommon in May, and passes again in October. I have a young bird, shot on October 6, which still retains a number of spotted feathers of the nestling plumage.

53. Muscicapa griseisticta (Swinhoe).

Styan, Ibis, 1891, p. 349.

Not particularly common, but found in woods and groves on the hills in May.

54. Muscicapa albicilla Pall.

Stvan, Ibis, 1891, p. 349.

One example was shot on October 3. I never met with another.

55. Poliomyias luteola (Pall.).

Styan, Ibis, 1891, p. 349.

Common enough on the hills in May and again in October.

56. Cyanoptila cyanomelæna (Temm.).

Styan, Ibis, 1891, p. 349.

Appears to be rather uncommon about Chinkiang. A male and a female shot on April 22 and May 9 and one or two individuals seen on September 27 are all that I have noticed.

57. Xanthopygia narcissina (Temm.).

Styan, Ibis, 1891, p. 349.

Styan mentions an example shot at Chinkiang. I have never seen the bird there.

58. XANTHOPYGIA TRICOLOR Blyth.

Styan, Ibis, 1891, p. 349.

The Tricolor Flycatcher arrives at Chinkiang about April 20, and is common during the summer. The natives catch it with bird-lime. I have a specimen thus obtained which has the eyebrow tinged with yellow.

This Flycatcher breeds on the plains, nesting in holes of trees on the banks of ponds or in their immediate vicinity.

I saw or heard many pairs in the groves of tall trees which line the long ponds at the back of the villages and hamlets in the low-lying country. The short but harmonious and powerful song of the male is to be heard in these localities throughout the early summer. The nests are, however, very difficult to find, and I secured only one with eggs. On June 23, 1893, a nest-hole was discovered near the top of a dead branch of a willow on the bank of a pond. It contained one young bird just about to fly; the others had already done so, and were with their parents on a neighbouring tree. This young bird escaping from the hand of its captor fluttered down and fell into the pond, and to our astonishment struggled straight back towards the bank, where it was rescued and replaced in the nest. The next nest-hole was discovered on May 29 of the following year. It was in a live branch of a Pride of India tree (Melia azaderach), also near a pond. We saw the female enter the hole with nestingmaterial, but on returning a few days later to take the eggs we found it empty save for one or two straws. The site, just by a public path, was too much exposed. On June 5 following another nest was found. It was, like the first, near the top of a partly-decayed branch of a willow growing on the side of a pond and was built in an old Woodpecker's hole. It contained five eggs, somewhat incubated. These eggs are of a pinkish cream-colour speckled with pale orange-red or pale burnt-sienna over reddish-violet spots. One of them has besides a few minute black specks on the larger end. The markings are chiefly concentrated about the larger end of the eggs. One egg has a ring of confluent specks round the larger end, another having a lighter, and two others irregular rings. They measure $0.67 \times 0.51''$, $0.68 \times 0.52''$, $0.69 \times 0.52''$ 0.53'', $0.70 \times 0.51''$, and $0.70 \times 0.53''$. The nest was a very fragile cup-shaped fabric of bamboo-leaves and fine roots, lined with a little hair and fragments of fine roots and grassstems. The boy who climbed up the tree unfortunately partly destroyed the nest in taking it out. The inner diameter is about 2½ in.

This Flycatcher appears to be very pugnacious, and attacks

other birds when they happen to come anywhere near the nest-hole. I once saw a male furiously attack and drive off a Spark-headed Woodpecker that was climbing about some trees near its nursery; and after we had taken the nest and eggs described above, the female, on seeing a Lesser Tit fly to the branch where the hole was, darted out from a neighbouring tree and drove it away.

59. TERPSIPHONE INCII (Gould).

Styan, Ibis, 1891, p. 350; La Touche & Rickett, Ibis, 1905, p. 40.

Ince's Paradise Flycatcher is very common in summer, arriving about the first week in May. It breeds in the treeand bamboo-copses on the plain and also in the woods on the hills. The nests that I saw were placed at heights varying from four to twenty feet from the ground. A very pretty specimen found, empty as yet, on May 29, was made of bright green moss and plentifully spangled outside with the downy feathers of wild Doves. The eggs are laid in June. Two clutches of four eggs each and an incomplete clutch of two, taken on June 10, 21, and 18 respectively, average $0.84 \times 0.61''$; the largest of these is $0.87 \times 0.64''$, the smallest $0.82 \times 0.59''$. The shape of eight of these eggs is narrow ovate, the other two are rather broad ovate.

White males are very common at Chinkiang, while at Foochow they are comparatively scarce.

60. Pratincola maura (Pall.).

Styan, Ibis, 1891, p. 337.

A few pass in April and early in October. Those seen in spring were all in full breeding-dress.

61. RUTICILLA AUROREA (Pall.). Styan, Ibis, 1891, p. 338. A very common winter bird.

62. Calliope Camskatkensis (Gm.).

Erithacus calliope (Pall.); Styan, Ibis, 1891, p. 338.

I shot a young male in some bushes by a pond on November 3, and the collectors shot a female on May 21 following. On October 16, a couple of years after, while looking for Pheasants in some bean-fields at the foot of the grass-covered hills near Chinkiang, I came across a number of these birds. They were among the beans, and when flushed generally flew into the thick cover at the base of the hills. I secured on that occasion a male and a female.

63. LARVIVORA CYANUS (Pall.).

Erithacus cyanus (Pall.); Styan, Ibis, 1891, p. 338.

This bird seems rare about Chinkiang. The only specimen which I have seen (a male in partly immature dress) was shot by the collectors on the hills on May 19. They saw another on May 15.

64. Tarsiger cyanurus (Pall.).

Styan, Ibis, 1891, p. 349.

Very few, if any, of these birds winter about Chinkiang. They pass in March and April. Once, on April 13, I saw on the hills a great number which had evidently just arrived.

65. MERULA MANDARINA (Bp.).

Styan, Ibis, 1891, p. 332; La Touche & Rickett, Ibis, 1905, p. 42.

The Chinese Blackbird is very common on the plain, but appears to be absent from the low hills and loess country at the back of Chinkiang. The natives rear it in cages as in South China. It breeds commonly on the plain from April to July. Fresh eggs were brought to me on April 20 and some nearly fresh on July 11, so that there are two or three broods during the year. A nest taken on June 18 contained six nearly fresh eggs. The nests, as in Fohkien, are built on the boughs of trees, generally at a good height from the ground.

66. MERULA PALLIDA (Gm.).

Styan, Ibis, 1891, p. 332.

A common winter bird, remaining as late as the end of April. As a rule it is found in thick cover and in gardens, orchards, &c., but on one occasion I shot an individual perched on a bare tree in the middle of a field.

67. MERULA OBSCURA (Gm.).

Styan, Ibis, 1891, p. 332.

Passes Chinkiang in May. It is by no means common.

68. Merula Hortulorum (Sclater).

Styan, Ibis, 1891, p. 332.

Passes in April and May. It appeared to be very common in 1902 and nine examples were shot from the 16th to the 27th of April. I also obtained one on May 5. Most of these were adult males, but one or two were young males with spotted breasts and two or three were females. They frequented woods on the hills and thickets and copses on the plain.

69. MERULA FUSCATA (Pall.).

Styan, Ibis, 1891, p. 333.

A common winter bird. It becomes very abundant in early spring and remains until the latter half of April.

70. Merula naumanni (Temm.).

Styan, Ibis, 1891, p. 332.

Also a common winter bird, whose numbers greatly increase in early spring. The collectors, who shot one on April 14, told me that on April 22 they saw two flocks of Thrushes, either of this species or *M. fuscata*, going north, each flock being composed of about two hundred individuals.

71. Geocichla sibirica (Pall.).

Styan, Ibis, 1891, p. 333.

I met with small parties of this Thrush on September 27 and October 16, and shot two females on the first-mentioned date. On both occasions the birds were in woods on the hills and were feeding on the ground, whence they flew into trees when frightened.

72. Oreocincla varia (Pall.).

Styan, Ibis, 1891, p. 333.

The collectors saw one example on May 15 amongst woods on the hills. I believe that I saw another on April 19, a year or two after, in the same woods.

73. Monticola solitaria (P. L. S. Müller).

Styan, Ibis, 1891, p. 333.

A male was sent to me from Kaoyu Lake, on the north bank of the Yaugtze, by Father Perrin, S.J. I did not shoot any specimens at Chinkiang, but have seen near the summit of one of the higher hills of the locality, on May 12 and 25, Rock-Thrushes which were most likely of this species. They probably bred there. I saw one or two on the same hill on September 16, and from the 8th to the 14th of that month some frequented the cliff behind our house and a neighbour's roof. These were evidently migrating.

74. Monticola gularis (Swinhoe).

Styan, Ibis, 1894, p. 333.

On September 27, 1901, I shot a female in a wood a few miles from Chinkiang. The next year, on October 5, I shot a male in a pine-wood not far from the same place.

75. UROLONCHA ACUTICAUDA (Hodgson).

Styan, Ibis, 1891, p. 356; La Touche & Rickett, Ibis, 1905, p. 42.

A scarce resident. I have seen it in the Custom House garden, where a nest was built in 1900 in a small tree close by the entrance-door. I have met with the bird only once in the country; the collectors also noticed it once.

76. Coccothraustes Japonicus T. & S.

Styan, Ibis, 1891, p. 352.

On the 27th of April, 1900, I met with a party of Hawfinches in a pine-wood a couple of miles from Chinkiang. They were very shy, and concealed themselves carefully in the thickest parts of the foliage, darting out as I approached to hide in some other tree fifty yards or so further on, where they remained concealed and absolutely quiet until again disturbed. As I had only a small collecting-gun and it was getting dusk I secured but one example. I have never seen any of the birds since.

77. EOPHONA MELANURA (Gm.).

Styan, Ibis, 1891, p. 353.

The Black-tailed Hawfinch is a common resident species.

It breeds in May and June, generally building in high or, at least, medium-sized trees, and, as a rule, on a large horizontal bough at some distance from the trunk. An empty nest seen on June 18 was placed in the midst of a creeper in which the branch was partly wrapped up. This Hawfinch seems fond of the company of other birds, often building on trees where Blackbirds and Blue-winged Magpies have their nests.

I obtained at Chinkiang four nests with eggs. One, containing two stale eggs, was brought to me on June 14, 1903. On May 29 of the following year I took two nests, one containing four eggs nearly hard-set and another three that were fresh, while on June 5 following I found a fourth nest, which, as it contained but one egg, I left alone, sending a man to take it five days later. The two nests taken on May 29 are fairly deep cups, built in two parts. The inner part is a strong fabric of bamboo-leaves and coarse grassblades firmly welded together with mud, and perhaps also with cobwebs; wrapping up the walls of this inner structure is a casing of tendrils and fine twigs or coarse grass-stems, the base of the inner cup having rested on the branch itself. The lining is of slender roots with a few fine bamboo-leaves, and the edge of the nest is rather well finished and rounded off with the material of both the inner and the outer portions. Measurements: inner depth, 13 and 2 in.; inner diameter, a little under and a little over 3 in.; outer depth, about 3 in.; outer diameter (irregular), 5 in. and above. The nest brought on June 14, 1903, resembles the others, but the outer easing of twigs is missing (lost in taking, no doubt), while a certain amount of wool and a little moss enter into its composition. Its inner measurements are: depth. $1\frac{3}{4}$ in.; diameter, $3 \times 3\frac{1}{4}$ in. The fourth nest, brought to me on June 10, 1904 (said to be the one found by me on the 5th and subsequently deserted), is of a very different appearance. The materials are much the same as those of the other nests, but the bamboo-leaves composing the inner cup are not welded together and are quite loose, the outer casing of twigs is under as well as round this

inner cup, which is shallow. It seems to have been knocked about.

The eggs taken on June 14, 1903, and the incubated clutch of four taken on May 29, 1904, are of a broad ovate shape, and are coloured light olive-green with roundish and drop-like surface-spots and twisted broad lines and a few hair-lines of very dark brown (the lines beginning or ending in the spots) and shell-spots and lines of very dark dull violetgrey with fainter lines of the same. These markings are distributed pretty well all over the shell. Measurements vary from $0.87 \times 0.71''$ to $0.94 \times 0.74''$ (average $0.91 \times 0.73''$). The three fresh eggs taken on May 29 are of a long ovate shape. The ground-colour is a light grevish green; the spots and lines are very dark and almost confined to the broad extremity. Measurements: $0.97 \times 0.68''$, $0.97 \times 0.67''$, and $0.93 \times 0.69''$. The single egg brought to me on June 10 is very large: 1.01×0.74 ''. It is of a long ovate shape and resembles those last described. The marks are chiefly confined to the broader half of the shell.

78. Eophona migratoria Hartert.

Eophona melanura migratoria Hartert, Vög. pal. Fauna, 1903, p. 59.

This small form of *E. melanura* passes Chinkiang in May. A male and two females were shot by the collectors on May 3 and 5, 1902. It is this bird which is found in winter in Fohkien (see 'Ibis,' 1892, p. 427). It is noticeably smaller than typical *E. melanura*.

So far as I could make out from the series in the British Museum collection, this Hawfinch is found in Yunnan, Kwangtung, and Kiangsi, as well as in Fohkien. The specimens in the B.M. collection from East Siberia appear to me to be very much greyer and paler than any of the Chinese examples which I have seen, with the exception of one in my series from Fohkien, which is also a pale bird, intermediate in tint between Siberian and Chinese examples.

79. EOPHONA MAGNIROSTRIS Hartert.

Eophona personata (T. & S.); La Touche, Ibis, 1900, p. 36.

E. personata magnirostris Hartert, Vög. pal. Fauna, i. p. 58. A Masked Hawfinch seen by me in the possession of a native at Chinkiang had, according to its owner, been taken in the locality.

80. Chloris sinica (L.).

Styan, Ibis, 1891, p. 353; La Touche & Rickett, Ibis, 1905, p. 44.

A common resident. Specimens obtained at Chinkiang appear to be more brilliantly coloured than Fohkien birds.

The Chinese Greenfinch breeds at Chinkiang among the pine-woods on the hills. Two nests which I found were placed on small pines right in the centre of the foliage. One of these, taken on May 12, 1901, contained four muchincubated eggs, which are pure white, one having a few pale yellowish brown specks and the others a very few faint vellowish grey specks. One measures $0.70 \times 0.53''$ and the others $0.68 \times 0.50''$. On the same day a native gave me a nest with one egg coloured as described by Rickett and myself in our paper on Fohkien eggs and nests. It measures 0.73 × 0.51". Two years afterwards, on May 11, I found the second nest, which also contained white eggs. there were only two of them, I left it, and, two days later, sent a man to take it. He brought me back the nest with three eggs. One of these, of a long narrow ovate shape and measuring $0.75 \times 0.50^{\circ}$, is pure white with a few very faint yellowish specks on the larger end, another is ovate (0.70 × 0.52") and has a few similar markings on a white ground, and the third, also ovate $(0.73 \times 0.55'')$, is lightly speckled on the larger end with rather pale burntsienna. The three nests obtained are quite similar in make and size to these from Foochow, and, as I myself saw the parent birds on the nests containing the white eggs, there is no fear of any mistake having been made. The eggs of the Chinese Greenfinch are therefore of two types: a. Pale green, speckled with black and red; b. White, speckled with pale reddish or pale yellowish brown. Both styles occur at Chinkiang, while at Foochow the first type only has been obtained as yet.

81. Chrysomitris spinus (L.).

Styan, Ibis, 1891, p. 353.

The Siskin is abundant in April and during the first part of May. I have not noticed it at any other time. The natives eatch it with bird-lime and keep it as a cage-bird.

82. Fringilla montifringilla L.

Styan, Ibis, 1891, p. 352.

Small parties may be seen during winter in the open country and in the reed-beds. During March and April large flocks frequent the woods and open country.

83. Passer montanus Briss.

Styan, Ibis, 1891, p. 352; La Touche & Rickett, Ibis, 1905, p. 44.

Abundant, as elsewhere in China, in towns and villages.

84. ÆGIOTHUS LINARIUS (L.).

On November 23 a bird-catcher brought me a live Redpoll, which I took to be of this species. It had been caught with bird-lime. I kept it in a cage for some time, but unfortunately it escaped. The bill of this bird was yellow, with brown culmen; the legs were very dark, almost black.

85. Emberiza spodocephala Pall.

Styan, Ibis, 1891, p. 353.

A very common winter bird, arriving early in October and remaining until late in May.

86. EMBERIZA MELANOPS Blyth.

Styan, Ibis, 1891, p. 353.

A fine male was shot by the collectors on April 26. It is the only individual of this species which I have seen at Chinkiang; I do not think that this bird breeds in the vicinity.

87. Emberiza fucata Pall.

Styan, Ibis, 1891, p. 354.

This Bunting is a very common resident at Chinkiang, frequenting grass-fields in the low country and grass- or brushwood-covered hills. The nests are extremely hard to find. The collectors took one on May 28, 1902, shooting

the female at it. It was found on the ground on the hills in a tussock of grass. This nest was a somewhat fragile cup, made of grass-stems, grass-blades, and a few small roots and twigs, with a lining of very fine grass-stems, fine roots, and hair. The outer measurements were: depth about $2\frac{3}{4}$ in., diameter $4 \times 4\frac{1}{2}$ in.; the inner measurements depth of cup between $1\frac{3}{4}$ and 2 in., diameter $2\frac{1}{2}$ in. The eggs, five in number, were fresh. The colour is greyish white, very thickly stippled and faintly streaked with light brown. Two of the eggs have besides an underlying stippling of grey. The shape varies from oval, with both ends pointed, to broad ovate. They measure: 0.76×0.60 " (two eggs), 0.77×0.59 ", 0.77×0.61 ", and 0.80×0.61 ".

Five other nests with eggs, which I can only refer to this Bunting, were procured from natives on May 12, June 16, June 28, July 2, and August 17. These nests had apparently all been found on the ground among grass on the hills. The nest and eggs obtained on May 12 are very similar to those taken by our men. The inner measurements of the nest are the same, the outer measurements being rather smaller. The eggs are greyer in appearance; they are marked, but not so thickly, with streaks and a stippling of grevish brown over underlying grey stipples; they are also smaller on average $(0.75 \times 0.58^{\prime\prime})$ to $0.76 \times 0.60^{\prime\prime}$). The clutch taken on July 2 contained five slightly incubated eggs, resembling these two clutches, but larger $(0.77 \times 0.61'')$ to $0.80 \times 0.65''$) and more lightly and sparsely marked. The man who took them caught a full-fledged bird of the year, to shew me to what species they belonged. Two clutches of four eggs each, slightly incubated, taken on the 16th and 28th of June, are very different, being blotched, spotted, and speckled with brown (in one clutch bright brown) over underlying violetgrey spots, chiefly at the broad end. In most of these eight eggs some of the underlying marks are streaky, approaching the style of those of the finely marked clutches. The nests containing these have a final lining of hair from cows' tails over the fine root-lining. Otherwise, in measurements, build, and materials, they are much the same as the

other. The fifth clutch, brought to me on August 17, contained four much incubated eggs intermediate in markings between the finely speckled and the blotched sets. They are thickly spotted, mottled, and stippled with brown over the same violet-grey underlying marks. They measure from $0.78 \times 0.64''$ to $0.82 \times 0.65''$.

The boy who sold these eggs to me picked out a specimen of *Emberiza fucuta* from a boxful of Buntings as being the kind of bird which laid them. I have therefore little doubt that I am correct in referring these five clutches to *E. fucuta*. I utterly failed either to find any nests myself or to induce natives to shew me them *in situ*.

The blotched eggs might be those of *E. melanops*, which, Styan says, breeds on the Yangtze; but this is unlikely, as I procured only one example of that species, as stated above, and never saw another.

88. Emberiza Rustica Pall.

Styan, Ibis, 1891, p. 354.

A very common winter bird, leaving in March. It is found in woods as well as in open country.

89. Emberiza pusilla Pall.

Styan, Ibis, 1891, p. 354.

Passes in April and at the beginning of May. It does not winter at Chinkiang, so far as I know.

90. Emberiza cioides Temm.

Emberiza castaneiceps Moore; Styan, Ibis, 1891, p. 354. E. cioides Temm.; La Touche, Ibis, 1900, p. 36; La Touche & Rickett, Ibis, 1905, p. 45.

This Bunting is a very common resident on the hills. It builds in April, and the eggs are laid at the end of April or in the beginning of May. The natives say that there are two broods in a season. The nest is generally built low down in a small pine. One, however, which I took, was placed right at the top of a small pine fifteen feet high. The female sits pretty closely, and on several occasions I have been able to get quite a near view of her upon the eggs. While she

is thus occupied, the male usually sings perched on the top branches of a small tree in the immediate neighbourhood.

The materials composing nests taken at Chinkiang are the same as in those from Fohkien. The number of eggs in a clutch is usually four or five, but sometimes only three. I described in 'The Ibis' for 1900 (p. 36), eggs of E. cioides from four taken at Kuatun in N.W. Folkien. The large series taken by me at Chinkiang enables me now to describe them better. Normally the ground-colour is grevish white. The markings consist of hair-lines and scrawls of very dark brown, short or long, twisted if short, or wound if long, in an ever-varying pattern round the larger end of the egg, over similar underlying lines of violet-grey. In many cases there are roundish or drop-shaped spots, which, as a rule, terminate or begin the lines. The markings almost always form a cap or ring, but exceptionally this is not apparent, the surface-markings consisting of spots or angular lines scrawled irregularly over the egg, the apical part of which is, however, almost always free from spots or lines. The ground-colour of these abnormal eggs is suffused with pinkish. Rarely, some clutches have but few marks: one of this kind in my collection shews a few hair-lines and the ground is marbled with underlying grey, while two of the eggs have, besides, a couple of yellowish blotches. These vellow marks appear also in a clutch given by Rickett with the rest of his collections to the British Museum. The shape of the eggs is normally broadly ovate, exceptionally oval. There is great variation in the size. Forty-six eggs range in length from 0.68" to 0.82" and in breadth from 0.55" to 0.64". The average of forty-one of these is $0.77 \times 0.61''$. A very small clutch taken by me, and not included in this estimate, averages $0.694 \times 0.56''$, the largest of these being $0.71 \times$ 0.56'' and the smallest $0.68 \times 0.56''$.

The female of *Emberiza cioides* appears to have at Chinkiang two styles of plumage. The most common is that given in descriptions of the species; but I have two females, shot on February 27 and April 28, which resemble the adult male in every respect except as regards the vertex, which is

streaked with grey, the chest, which has no chestnut band, and the lesser wing-coverts, which are of a duller grey.

91. Emberiza elegans Temm.

Styan, Ibis, 1891, p. 355.

A common winter bird. It leaves about the beginning of April.

92. Emberiza Chrysophrys Pall.

Styan, Ibis, 1891, p. 355.

Four examples were obtained by the collectors on April 24 and 29 and May 5. I shot another, in what appears to be the full breeding-plumage, on April 24, a couple of years afterwards.

The birds obtained by our men differ from the example shot by me in having the median line down the centre of the crown starting almost from the forehead, whereas in my bird this begins only from the hinder part of the crown; also in my bird the yellow stripe above the eye starts just above the eye, in the other birds it begins from the bill. The lores of the first four birds have an admixture of yellow, and the cheeks, instead of being pure black, are brownish, with some yellow under the eye.

93. Emberiza tristrami Swinhoe.

Styan, Ibis, 1891, p. 354.

Several specimens, all more or less in full breeding-plumage, were shot by the collectors on May 3 and 5. This Bunting appears to moult in N.W. Fohkien (see 'Ibis,' 1900, p. 36).

94. Emberiza Aureola Pall.

Styan, Ibis, 1891, p. 355.

This Bunting arrives in immense numbers at the end of August, many individuals remaining until the end of October. In 1902 they appeared much earlier, as on July 30 of that year I saw an adult male in full breeding-dress and two females or young birds. The same year a friend told me that he had seen, at the beginning of August, flocks of Buntings, which I have no doubt were

of this species. On their arrival from the north these birds are in worn summer-plumage. They begin to moult at once, flocks composed of individuals in all stages of the moult being met with throughout September. Towards the middle of that month they seem to have lost their tails, and when on the wing look like small Quail. By the end of September most of them have assumed their winter dress, and from that time they gradually leave. They reappear in May, among scrub on the hills and among the crops in the plain, when they are extremely numerous. The adults are then in full breeding-dress.

On May 8, 1904, while walking out to the hills, I saw, on some large trees near the road, flocks of this species all singing and twittering in concert. This chorus of song was extremely beautiful and impressive. The birds were very wild, and I could not approach within shot; but, as they flew off, I recognised them as being *E. aureola*.

95. Emberiza Rutila Pall.

Styan, Ibis, 1891, p. 355.

Passes in May and October. On May 5, 1901, I saw great numbers on the hills. I have a young bird, in moult, shot on October 6.

96. Emberiza passerina Pall.

Styan, Ibis, 1891, p. 355.

Very abundant in winter among the reeds.

97. Emberiza Yessoensis Swinhoe.

Styan, Ibis, 1891, p. 355.

I shot a single female example of this Bunting on November 1, on the low brushwood-covered hills a few miles from Chinkiang. I saw no other specimen during my stay at Chinkiang, but no doubt I overlooked the species while shooting in the reed-beds.

98. Emberiza Pyrrhulina Swinhoe.

? Emberiza pyrrhuloides Pall.; Styan, Ibis, 1894, p. 334.

I shot a female of this Japanese species on March 9. It was perched on a thin willow-bush overhanging a pond,

and let me pass quite close to it without moving. I have never seen another example at Chinkiang. On comparing my specimen with the Recd-Buntings in the British Museum, I found that it agreed exactly with the series of *E. pyr-rhulina* from Japan. The birds in the British Museum Collection labelled *E. pyr-huloides* belong to a very large species which has a range extending from Astrachan to Yarkand. I therefore presume that Styan by *E. pyr-huloides* Pall. means the smaller Japanese form. The birds which he mentions as having been obtained by me at Newchwang in South Manchuria were, so far as I can remember, identical with the Japanese species.

99. Plectrophanes lapponicus (L.).

Styan, Ibis, 1891, p. 356.

On November 28 I bought three specimens of the Lapland Bunting from some men who had them among bunches of Larks, which they were hawking about the streets.

100. COTILE RIPARIA (L.).

Styan, Ibis, 1891, p. 351; La Touche & Rickett, Ibis, 1905, p. 45.

Seen in May, July, and September. On September 27 I saw a great many examples flying along with *II. nipalensis* and resting on the telegraph-wires.

101. HIRUNDO GUTTURALIS Scop.

Styan, Ibis, 1891, p. 351.

The Eastern Chimney-Swallows are abundant in summer. They arrive towards the 20th of March and leave in October. They nest in native houses both in the town and the country, and also in the verandahs of foreign houses and under the caves of godowns on the British Concession. The eggs are laid in May. Eleven eggs average $0.72 \times 0.53''$; the largest is $0.77 \times 0.54''$, and the smallest $0.69 \times 0.53''$. The colour is white, speckled, spotted, and sometimes streaked with dark reddish brown and darkish purple over pale purple underlying spots. One abnormal egg has no apparent underlying

spots, and the surface-marks consist of very pale brown spots of irregular shape.

102. HIRUNDO NIPALENSIS Hodgs.

Hirundo alpestris Pall.; Styan, Ibis, 1891, p. 351.

The Striped Swallows which summer at Chinkiang are not distinguishable from specimens shot at Swatow, Amoy, and Foochow. They arrive about the middle of April, and are abundant in the country all through the summer and also during September and October, when large flights may be seen hawking over the fields or resting on the trees and telegraph-wires. I have not noticed any after the first week in November.

These Swallows keep to the country, breeding in certain villages near the hills on the north bank of the river. I have never observed them about the mud-and-bamboo thatched huts on the plain. They commence building towards the end of April, and lay in May and June. Nests seen by me in the native houses of a village on May 10 were not retort-shaped, but were closed structures with the entrance-hole in front and about 1½ in. in diameter. They looked like bowls with the base knocked out. It may be that they were not finished. Still one of them contained eggs, a specimen of which, shown to me by the owner of the house, was of a narrow ovate shape and pure white. I did not get any eggs that season. The following year one of my collectors brought me a number of clutches on May 31, June 2, 12, and 28. Those brought on the last date were much incubated, and had probably been taken from a deserted nest; some of the others were fresh or nearly fresh, while one or two were much incubated. The eggs are all pure white, like that seen by me as stated above. The full clutch, as a rule, consists of four eggs, but one of those brought to me contained five, and another had only three which were slightly incubated. The most usual shape seems to be a narrow ovate inclining to oval, but I have some specimens which are cylindrical oval and some ovate with much pointed apex. Thirty-one eggs average 0.82 × 0.56"; the longest measures

 $0.86 \times 0.56''$, and the shortest $0.77 \times 0.54''$. In diameter they range from 0.52'' to 0.60''.

103. Ampelis Japonicus (Siebold).

Styan, Ibis, 1891, p. 351.

This Waxwing passes Chinkiang on migration in May, when I procured several examples from the bird-catchers, who take them with bird-lime. I kept one of these alive for several months. I have not seen the bird at any other time.

104. MOTACILLA LEUCOPSIS Gould.

Styan, Ibis, 1891, p. 342; La Touche, Ibis, 1899,
p. 412; La Touche & Rickett, Ibis, 1905, p. 46.

Abundant in March. It appears again in September.

105. MOTACILLA OCULARIS Swinhoe.

Styan, Ibis, 1891, p. 343.

Abundant in spring. One year, on March 16, I saw a great number, which had evidently just arrived. Many were perched on trees at the edge of a field. The birds are also very common in October, and a few are to be found during winter.

106. MOTACILLA LUGENS Kittlitz.

Styan, Ibis, 1891, p. 343.

I have noticed a fair number of these Wagtails on marshy fields, chiefly in spring.

107. MOTACILLA MELANOPE Pall.

Styan, Ibis, 1891, p. 343.

Common in spring and autumn. Specimens shot in April and May were all in full breeding-dress.

108. MOTACILLA BOREALIS Sund.

Styan, Ibis, 1891, p. 343.

I shot one example in breeding-dress on April 20. I did not meet with any large flocks of Wagtails of the Budytes group at Chinkiang. Three individuals seen in May perched on a tree by a small marsh and a few noticed in fields at the end of September and in October are, besides the above-mentioned bird, all that I have observed. No doubt M. flava, M. borealis,

and possibly M. taivana will all be found to pass Chinkiang every year, but they are certainly much less common there than on other parts of the Lower Yangtze.

109. Limonidromus indicus (Gm.).

Styan, Ibis, 1891, p. 344.

A common bird in woods on the hills at the end of April and during May. I have also shot it in the open.

110. Anthus maculatus (Hodgson).

Styan, Ibis, 1891, p. 344.

A common winter bird. Very abundant in spring, when it is found both in faded and new plumage. The collectors reported having seen great numbers on April 22, which had no doubt just arrived.

111. Anthus Japonicus T. & S.

Styan, Ibis, 1891, p. 344.

Abundant in winter. On March 22 I obtained a specimen which was beginning to moult, and from the 14th of April to about the 20th birds in full breeding-dress were shot in the wheat-fields. After the last-mentioned date they became very scarce.

I have never seen Anthus cervinus at Chinkiang.

112. Anthus Blakistoni Swinhoe.

Styan, Ibis, 1891, p. 344.

This Pipit is not at all uncommon in winter. I have sometimes seen it in small parties, but, as a rule, it is a solitary bird, frequenting the banks of creeks and ponds. I have several times seen it perch on trees. The call-note is very different from that of the other Pipits with which I am acquainted. It probably leaves about the end of March and returns in November.

113. Anthus Richardi Vieill.

Styan, Ibis, 1891, p. 344; La Touche and Rickett, Ibis, 1905, p. 46.

Occurs only on passage and is not common. All the examples seen at Chinkiang were very wild. They pass at

the end of April and during May, and again in September and October.

As observed in 'The Ibis' for 1896, p. 494, and 1899, p. 414, Anthus infuscatus Blyth is the small dark form of this species which breeds in Fohkien, while Anthus kiangsinensis A. David was founded on a young example of Oreocorys sylvanus (Hodgson).

114. Alauda arvensis L. Styan, Ibis, 1891, p. 356. Common in winter.

115. Alauda cœlivox Swinhoe. Styan, Ibis, 1891, p. 356.

This Lark is very common in summer and breeds on the hills. It is a favourite cage-bird with the natives, who rear the young from the nest.

I have five eggs. Four were taken on May 12 from a nest, found on the lower ridge of one of the hills, which had been forsaken. These, though much incubated, were cold, and I did not see the parent birds, but there is no doubt as to the identification. Three of the eggs are ovate and one is long ovate. The colour is greyish white very thickly mottled (in one case speckled) with sap-green over underlying violet blotches. In three specimens there is a well-marked ring round the larger end, the fourth having a cap of confluent surface and underlying marks. They measure 0.90×0.64 " (two eggs) and 0.88×0.64 " (two eggs). My fifth egg was laid by a tame bird. It is broader and more pointed, and measures 0.86×0.65 ". The colouring is the same, there being a ring of underlying marks and irregular blotches of sap-green scattered over the shell, chiefly at the larger end.

[To be continued.]